



Griffiss Institute Hosts Quantum Networking Tech Demonstration at Innovare Advancement Center, In Partnership with Qunnect Inc.

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Rome, NY – Griffiss Institute President & CEO Heather Hage announced today that Innovare Advancement Center, in cooperation with Oneida County, hosted the first-ever field demonstration of Qunnect Inc's Auto Polarization Compensator. The device, whose development was supported through the AFRL Quantum Collider awards, transforms standard telecom fiber into quantum-ready communication channels.

"Partnering with startups to bring new defense technologies to life is central to our mission at the Griffiss Institute," said Hage. "Qunnect's demonstration of its Auto Polarization Compensator at Innovare Advancement Center is precisely the kind of leading edge research and tech transfer we were built to enable. With partners like AFRL, companies like Qunnect can leverage world-class resources right here in Upstate New York to develop next generation technologies for secure communications."

During this test, Qunnect demonstrated stabilization of the fiber channel at over 95% fidelity for a 24-hour period, supporting 98% channel uptime; these performance specifications mark a critical step in bringing quantum technologies out of the lab and into the real world.

"The Griffiss Institute and its capabilities at Innovare Advancement Center allow for the types of opportunities that can enable meaningful connections for small businesses committed to deep-tech R&D innovations," said Noel Goddard, Qunnect Chief Executive Officer. "We are proud to see our instrument evolve from an idea into a product thanks to the support of AFRL's Information Directorate and the leadership at Innovare. We hope to pilot other components of our product suite, including our flagship product, the world's first commercial Quantum Memory, on our mission to launch products designed to operate without extreme cooling or vacuum support, while leveraging existing telecom infrastructure."

Development of the Qunnect Auto Polarization Compensator was sponsored through 2 awards, spanning 2020-2022, by the Air Force Research Laboratory through its Small Business Technology Transfer program.

"The U.S. Air Force Research Lab's (AFRL) support of quantum networking through activities such as the Quantum Collider continues to advance this critically important technology area. This demonstration also highlights the importance of the STTR program in driving novel solutions by small businesses in a rapidly changing field which will ultimately lead to revolutionary new capabilities for the Department of the Air Force. I would also like to thank our partners at the Griffiss Institute and the Innovare Advancement Center for their efforts in making this unique demonstration possible," stated Dr. Michael Hayduk, Deputy Director of the Information Directorate at the Air Force Research Lab.

Quantum communication technologies utilize new methods to secure and transmit information. Qunnect's Quantum Repeater product suite supports a communication protocol to distribute entanglement, recently the subject of the 2022 Nobel Prize in Physics. The Auto Polarization Compensator is one of the instruments Qunnect designed to interface quantum instruments with real world infrastructure. Qunnect was able to design, build, test, and deploy this technology quickly and effectively because of the unique resources made available through Innovare Advancement Center. In this case, success meant melding the sponsorship and scientific expertise of AFRL and the support of Oneida County to access the telecom fiber infrastructure needed to build the Quantum Research Fiber Testbed at Innovare.

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About the Griffiss Institute

The Griffiss Institute cultivates talent and technology that tackles the world's biggest challenges. It does so alongside the United States Department of Defense's Air Force Research Laboratory Information Directorate (AFRL/RI) and an international network of academic, government, and industry partners. Founded in 2002 in the Mohawk Valley region of CNY, Griffiss Institute has origins as an incubator of ideas. With technology transfer at its core, it forges connections and pathways that enable real-life solutions to make their way from the lab bench to the kitchen counter. Griffiss Institute continues to elevate the next generation of STEM students, professionals, and technologies that enhance our national security.

About the Innovare Advancement Center

The Innovare Advancement Center is a world-class research and collaboration destination with resources rivaling top-tier laboratories. The Center is the focal point of a growing Innovare family of spaces that enable discoveries in artificial intelligence, machine learning, cybersecurity, quantum, and unmanned aerial systems – interconnected physically and to a vast network of knowledge and expertise. Home to 40,000 square feet of high-tech and high-speed communications-enabled working spaces, the Innovare Advancement Center also boasts an auditorium with a capacity for over 250 people and an access point to the NY UAS Test Site – a 50-mile drone corridor for advanced unmanned aircraft operations.

About Qunnect

Qunnect innovates and commercializes the core technologies needed for scalable quantum-safe communication. In 2021, the company commercialized the world's first quantum memory. The memory serves as the cornerstone to Qunnect's Quantum Repeater product suite, an integrated solution for long-distance distribution of entanglement across existing telecommunications infrastructure. The company is Headquartered in the Brooklyn Navy Yard in New York City. Qunnect is grateful for research support from the US Department of Energy, the US Air Force, and the National Science Foundation. For media inquiries, please contact: media@quconn.com

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